

REMARKS

In the non-final Office Action, the Examiner rejects claims 1-10, 12-14, 15-22, and 24-28 under 35 U.S.C. § 103(a) as unpatentable over LAXMAN et al. (U.S. Pub. No. 2003/0091032) in view of OSMAN (U.S. Patent No. 6,801,523); and objects to claims 11 and 23 as allowable if rewritten into independent form.

By way of the present Amendment, Applicants have canceled claims 1-25 and have amended claims 26-28 to improve form. Applicants also present new claims 29-54. No new matter has been added. Claims 26-54 are now pending.

Pending claims 26-28 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over LAXMAN et al. in view of OSMAN. Applicants respectfully traverse this rejection.

Amended independent claim 26 is directed to a method comprising receiving, via a first network access device, a communication comprising a content portion and a signaling portion in accordance with a QSIG access protocol; encapsulating the content portion and the signaling portion of the communication via the first network access device to provide a plurality of respective content packets and signaling packets; transmitting the signaling packets from the first network access device to a control component via the data network; establishing, via the control component, a connection within the data network between the first network access device and a second network access device in response to receiving the signaling packets; and communicating the content packets from the first network access device to the second network access device over the established connection. Applicants respectfully submit that LAXMAN et al. and

OSMAN, whether taken alone or in combination, do not disclose or suggest this combination of features.

For example, LAXMAN et al. and OSMAN do not disclose or suggest encapsulating the content portion and the signaling portion of the communication via the first network access device to provide a plurality of respective content packets and signaling packets. The Examiner relies on paragraphs [16], [18] and [21] to [23], and Figures 7 and 9 of LAXMAN et al. for allegedly disclosing this feature. Applicants respectfully disagree with the Examiner's interpretation of LAXMAN et al.

Paragraph [16] of LAXMAN et al. recites:

In another aspect, the invention is a method of call processing. The method includes connecting a network to a call feature server having a host interface platform, connecting the network to an access gateway having a local switching unit and receiving a request to route a call from the access gateway. The method also includes sending a control signal from the call feature server to the local switching unit to route the call and sending a bearer channel control signal to establish a bearer channel.

This section of LAXMAN et al. merely teaches an access gateway and call feature server that routes a call through a network using bearer control signals to establish a bearer channel. There is no specific mention of content and signaling portions of a communication, nor providing packets. This section of LAXMAN et al., therefore, does not teach or suggest the feature of encapsulating the content portion and the signaling portion of a communication via a first network access device to provide a plurality of respective content packets and signaling packets, as recited in claim 26.

Paragraph [18], of LAXMAN et al. recites:

In still another aspect the invention is a call feature server for a call processing system. The server includes a centralized controller to send control signals to a

plurality of distributed processors, a local area network (LAN) to couple the centralized controller to each of the plurality of distributed processors to perform decentralized call processing, and a host interface platform connecting the LAN to a network to send control signals and bearer signals, the host interface platform configured to interface with a packet network.

This section of LAXMAN et al. teaches a call feature server and a host interface platform that sends control and bearer signals to a LAN network, wherein the host control interface is configured to interface with a packet network. This section of LAXMAN et al. does mention a packet network, but does not teach encapsulating *content* and *signaling* portions of a communication. Therefore, this section of LAXMAN et al. does not teach or suggest the feature of encapsulating the content portion and the signaling portion of a communication via a first network access device to provide a plurality of respective content packets and signaling packets, as recited in claim 26.

Paragraph [21] of LAXMAN et al. recites:

In another aspect, the invention is a method of call processing. The method includes receiving a request to route a call, sending control signals via a host interface platform through a network to set-up the call and sending bearer control signals.

This section of LAXMAN et al. teaches routing calls through a host interface platform that includes bearer control signals. Again, there is no mention of encapsulating *content* and *signaling* portions of a communication. Therefore, this section of LAXMAN et al. also does not teach or suggest the feature of encapsulating the content portion and the signaling portion of a communication via a first network access device to provide a plurality of respective content packets and signaling packets, as recited in claim 26.

Paragraph [22] of LAXMAN et al. recites:

In a still further aspect, the invention is an access gateway for a call processing system. The gateway includes a local switching unit to set-up a call, a media gateway capable of TDM signal and packet message conversion, the media gateway receiving control signals from a network, the media gateway providing bearer control signals to the local switching unit from a call feature server, and a multiplexer to perform circuit emulation of TDM signals from the network.

This section of LAXMAN et al. teaches a media gateway that is capable of packet message conversion, receiving control signals, and providing bearer control signals. This section of LAXMAN et al. does not disclose or suggest the media gateway receiving content and signaling portions of a communication and encapsulating the content and signaling portions into content and signaling packets. Therefore, this section of LAXMAN et al. does not teach or suggest the feature of encapsulating the content portion and the signaling portion of a communication via a first network access device to provide a plurality of respective content packets and signaling packets, as in claim 26.

Paragraph [23] of LAXMAN et al. recites:

In another aspect the invention is a method of call processing. The method includes receiving a request to route a call, converting time division multiplex (TDM) signals to a packet compatible format, sending the request via a packet network to a call feature server and receiving control signals via the packet network from the call feature server to route the call.

This section of LAXMAN et al. teaches converting a TDM signal into a packet compatible format and sending the packet to a call feature server to route a call. Again, this section of LAXMAN et al. does mention a packet network, but does not teach encapsulating *content* and *signaling* portions of a communication. Therefore, this section of LAXMAN et al. cannot teach or suggest the feature of encapsulating the content portion and the signaling portion of a communication via a first network access device to provide a plurality of respective content packets and signaling packets, as recited in claim 26.

Regarding the Examiner's reliance on Figures 7 and 9 of LAXMAN et al., it is noted that the Office Action (pg. 21) does not reference any specific text from the Detailed Descriptions of Figures 7 and 9. The Office Action merely states that the claimed network access device is LAXMAN et al.'s "access gateway" and the claimed control component is LAXMAN et al.'s "call feature server" (Office Action pgs. 20-21). The text describing Figures 7 and 9 does not mention a "call feature server." Paragraphs [114] and [143] mention an "access gateway," however, these sections do not teach the access gateway *encapsulating content and signal portions of a communication to provide content and signaling packets*, as recited in claim 26.

The disclosure of OSMAN does not remedy the deficiencies in the disclosure of LAXMAN et al. That is, OSMAN also does not disclose or suggest the feature of encapsulating the content portion and the signaling portion of the communication via the first network access device to provide a plurality of respective content packets and signaling packets.

For at least the foregoing reasons, Applicants submit that claim 26 is patentable over LAXMAN et al. and OSMAN, whether taken alone or in any reasonable combination.

Claims 27-28 depend from claim 26. Applicants submit that these claims are allowable for at least the reasons as set forth above. Further, these claims recite additional features not disclosed or suggested by LAXMAN et al. and OSMAN.

For example, claim 28 recites mapping the signaling portion from a QSIG access protocol to another signaling protocol, and communicating the signaling portion to the second access device after the mapping. With respect to claim 28, the Office Action merely points to the same sections of LAXMAN et al. as applied to claim 26 to allegedly show this feature. There is no

teaching in LAXMAN et al. and OSMAN of mapping from a QSIG protocol to another signaling protocol, as recited in claim 28.

For at least these additional reasons, Applicants submit that claim 28 is patentable over LAXMAN et al. and OSMAN, whether taken alone or in any reasonable combination.

New claim 29 recites additional features that are not disclosed or suggested by the art of record. For example, independent claim 29 recites a method comprising receiving a communication comprising a QSIG content portion and a QSIG signaling portion; encapsulating the QSIG content portion and the QSIG signaling portion of the communication, by a first network access device, to provide a plurality of respective content packets and signaling packets; sending the signaling packets from the first network access device to a control component through a first D channel via a data network; establishing, via a second D channel from the control component to a second network access device, a B channel connection within the data network between the first network access device and the second network access device; and communicating the content packets from the first network access device to the second network access device over the established B channel connection. LAXMAN et al. and OSMAN do not disclose or suggest this combination of features.

For example, LAXMAN et al. and OSMAN do not teach sending signaling packets from a first network access device to a control component through a first D channel via a data network and establishing, via a second D channel from the control component to a second network access device, a B channel connection within the data network between the first network access device and the second network access device. At best, LAXMAN et al. recites establishing a bearer (B) channel; however, there is no teaching in LAXMAN et al. of employing D channels. Therefore,

LAXMAN et al. certainly cannot teach the claimed use of D channels in order to establish a B channel between a first and second network access device, as recited. OSMAN also does not disclose sending signaling packets from a first network access device to a control component through a first D channel via a data network and establishing, via a second D channel from the control component to a second network access device, a B channel connection within the data network between the first network access device and the second network access device. In fact, OSMAN teaches directly away from using B channels in column 6, lines 10-15, that recite: "This embodiment of the present invention utilizes QSIG/QVPN to set up a non-bearer related connection oriented call between an originating switch and a terminating switch. A non-bearer related connection oriented call allows the originating and terminating switches to establish a signaling connection between them without a corresponding B-channel (i.e. no bearer channel is used for information transfer)." Therefore, claim 29 is allowable over LAXMAN et al. and OSMAN whether taken alone or in any reasonable combination.

Claims 30-34 depend from claim 29. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 29.

Independent claim 35 recites a method comprising receiving a signal packet including QSIG signaling information; and establishing a bearer channel connection between a first network access device and a second network access device in response to receiving the signal packet. LAXMAN et al. and OSMAN do not disclose or suggest this combination of features.

For example, LAXMAN et al. and OSMAN do not disclose receiving a signal packet including QSIG signaling information and establishing a bearer channel connection between a first network access device and a second network access device in response to receiving the

signal packet. As admitted in the Office Action, LAXMAN et al. does not teach QSIG communications. OSMAN does teach QSIG communications; however OSMAN teaches establishing communications without bearer channel connections. That is, OSMAN specifically teaches away from the features recited in claim 35. Therefore, claim 35 is allowable over LAXMAN et al. and OSMAN, whether taken alone or in any reasonable combination.

Claims 36-39 depend from claim 35. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 35.

Independent claim 40 recites a method performed by a first network access device. The method comprises receiving a QSIG communication including a content portion and a signaling portion; encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content packets and signaling packets; and transmitting the signaling packets to a control component for use in establishing a connection to a second network device. LAXMAN et al. and OSMAN do not disclose or suggest this combination of features.

For example, LAXMAN et al. and OSMAN do not teach encapsulating the content portion and the signaling portion of the communication to provide a plurality of respective content packets and signaling packets. This feature is similar to a feature recited above with respect to claim 26. Applicants submit that claim 40 is patentable over LAXMAN et al. and OSMAN for at least the reasons given above with respect to claim 26. Therefore, claim 40 is allowable over LAXMAN et al. and OSMAN whether taken alone or in any reasonable combination.

Claims 41-44 depend from claim 40. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 40.

Independent claim 45 recites a system comprising a network access device configured to: receive a QSIG signal that contains signal portion and a content portion; encapsulate the received signal portion into signal packets and the received content portion into content packets; and transmit the signal packets to establish a communication channel to a second network access device. LAXMAN et al. and OSMAN do not disclose or suggest this combination of features.

For example, as set forth above with respect to claim 26, LAXMAN et al. and OSMAN do not disclose a network access device that encapsulates the received signal portion into signal packets and the received content portion into content packets. Therefore, claim 45 is allowable over LAXMAN et al. and OSMAN whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 26.

Claims 46-50 depend from claim 45. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 45.

Independent claim 51 recites a system comprising: a control component configured to: receive a signal packet that includes QSIG information; and establish a bearer communication channel between a first network access device and a second network access device using the received signal packet. LAXMAN et al. and OSMAN do not disclose or suggest this combination of features.

For example, LAXMAN et al. and OSMAN do not disclose receiving a signal packet including QSIG information and establishing a bearer channel connection between a first network access device and a second network access device in response to receiving the signal

PATENT
U.S. Patent Application No. 09/995,149
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packet. As admitted in the Office Action (pg. 21), LAXMAN et al. does not teach QSIG communications. OSMAN does teach QSIG communications; however OSMAN teaches establishing communications without bearer channel connections. That is, OSMAN specifically teaches away from the features recited in claim 51. Therefore, claim 51 is allowable over LAXMAN et al. and OSMAN, whether taken alone or in any reasonable combination.

Claims 52-54 depend from claim 51. Therefore, these claims are patentable over the art of record for at least the reasons given above with respect to claim 51.

In view of the foregoing amendments and remarks, Applicants respectfully request the Examiner's reconsideration of this application, and the timely allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 07-2347 and please credit any excess fees to such deposit account.

Respectfully submitted,

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